ABSTRACT

An electro-optic device is disclosed for altering the density of charge carriers within an integrated optical waveguide. The device includes a substrate, and an integrated optical waveguide extending across the substrate with two doped regions being provided such that an electrical signal can be applied across the doped regions to alter the density of charge carriers within the waveguide. The doped regions can each include a plurality of doped areas spaced apart from each other along the length of the waveguide.